Sphenoid: Lateral Sphenobasilar

Sphenoid (lateral sphenobasilar) tender points are often found approximately two to two and a half finger widths posteriorly from the lateral ridge of the orbit. A small depression can be felt in this area. This point can be tender in those with TMD, headaches, concussion symptoms such as blurred vision, and an aversion to light.

Palpation Procedure
- The patient is supine on the treatment table.
- While moving your finger posteriorly from the lateral ridge of the orbit, you will feel a slight depression in the greater wing of the sphenoid. This is usually the tender point area.
- Note the location of any tender points or fasciculatory response at the bony structure or overlying tissue.
- Once you have determined the most dominant tender point or fasciculation (or both), maintain light pressure with the pad(s) of the finger(s) at the location throughout the PRT treatment procedure until reassessment has occurred.

PRT Clinician Procedure
- The patient is supine on the treatment table.
- Place a bolster under the patient's knees for comfort.
- Using the near hand, monitor the tender point while placing the heel of the same hand over the frontal bone and zygoma for counterpressure, then apply a lateral pressure on the opposite greater wing of the sphenoid with the far hand toward the tender point.
The temporalis muscle is located on the temporal aspect of the cranium; its extensive origin attaches to the frontal, temporal, and parietal bones. Its fibers converge in a thick mass that extends under the zygomatic arch to connect to the coronoid process. This muscle can be involved with TMD, headaches, and stomatognathic dysfunction.

**Origin:** Temporal fossa and fascia  
**Insertion:** Coronoid process of the mandible  
**Action:** Elevates and retracts the mandible  
**Innervation:** Temporal branch of the mandibular nerve

### Palpation Procedure
- The patient is supine on the treatment table.  
- Place your fingers approximately one and a half finger widths superior to the zygomatic arch and palpate the fibers from anterior to posterior. Tenderness may be present in the anterior, middle, or posterior fibers, or a combination of all three.  
- Note the location of any tender points or fasciculatory response at the bony structure or overlying tissue.  
- Once you have determined the most tender point or fasciculation (or both), maintain light pressure with the pad(s) of the finger(s) at the location throughout the PRT treatment procedure until reassessment has occurred.

### PRT Clinician Procedure
- Sit at the head on the side opposite that of the tender point. With the near finger, monitor the tender point while the rest of the hand grasps the frontal bone. Place the heel of the far hand under the zygomatic arch.  
- With the near hand on the frontal bone, apply a force around an AP axis toward the tender point on the zygomatic arch while applying a cephalad force with the heel of the far hand (anterior fiber involvement).  
- For middle and posterior involvement, grasp the parietal bone with the near hand that is monitoring the tender point. Place the heel of the far hand under the zygomatic arch. With the near hand that is monitoring the tender point, exert a force along an AP axis toward the tender point. Apply a force in a cephalad direction with the heel of the far hand.

See video 12.5 for the temporalis PRT procedure.